Patterns of accumulation and social differentiation through a slow-paced agrarian market transition: the case of post-Soviet Uzbekistan

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Patterns of accumulation and social differentiation through a slow-paced agrarian market transition: The case of post-Soviet Uzbekistan

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Abstract

This article presents an analysis of contemporary Uzbek agrarian change. First, using mixed methods and triangulating secondary and primary data from Samarkand, it untangles emerging relations of production and exchange during the slow processes of market transition. It shows that different types of public investment, price regulation, subsidies, procurement mechanisms, and the pace of marketization to which crops are subject shaped a slow growth of rural social differentiation and private accumulation. Traditionally, cotton farms have been in a privileged position because they have access to more land and subsidized inputs of production. However, due to recent fast-track liberalization policies and state-led investment, farms producing high value crops—fruit and vegetables—are at the forefront of a new pattern of private accumulation. Second, the article reflects on how the gradual approach to market transition has so far squeezed private accumulation, enabling the centralization of surplus extraction from cotton and wheat. This state-led accumulation strategy is slowly fading, leaving space for market-oriented reforms that will entail new but uncertain distributional and developmental outcomes within and outside agriculture.

KEYWORDS
agrarian change, class, market transition, state accumulation, Uzbekistan

1 | INTRODUCTION

Since independence in 1991, the Government of Uzbekistan (GoU) has maintained an interventionist role in agriculture. Sixty per cent of its population still lives in rural areas, and agriculture is vital for subsistence. Until March 2020, cotton and winter wheat, historically Uzbekistan's major crops, were closely managed by the GoU through a monopsony system in which the state provides subsidized inputs, leases land, and buys at a fixed price on a condition that production quotas are met (International Food Policy Research Institute, 2020; Kandiyoti, 2002). However, in 2005, the GoU started to promote the expansion and intensification of fresh fruit and vegetable production—hereafter high value crops (HVCs)—amonglarge-scale farms known as *fermers* through investments in intensive gardening and greenhouses. The paper investigates how this change shaped patterns of accumulation through new marketization channels, changing labour relations, and increased class differentiation. The paper also enters into conversation with previous scholarship on agrarian change in Uzbekistan (e.g., Kandiyoti, 2002; Spoor, 2009; Trevisani, 2007; Zanca, 2010) in two ways. First, by offering an empirically grounded and up-to-date analysis of agrarian change in the Samarkand region, the article fills a temporal gap on how the most recent state-led reforms are reflected at the micro level through changing social relations of production and exchange. It shows that new drivers for private accumulation triggered by new local powers and by new market channels are slow and scattered. However, these are shaped and paced by government policy through recent increases in capital investment and *ad-hoc* deregulation of HVCs. Such new forces of accumulation are intersecting with pre-existing inequalities of access to means of production, local power, and capital. Second and connected to the previous point, the paper reflects on how changes and continuities in agriculture are still strongly determined by strategies of public accumulation and surplus transfer that affect the broader process of capitalistic development in Uzbekistan beyond agriculture. This case offers insights for the renewed scholarship on state capitalism and agrarian change to inform the debate on alternatives to neoliberalism. Finally, it reflects on the methodological validity of a mixed method and inductive approach to study agrarian change. The paper is structured as follows: Section 2 contextualizes the theoretical debate on post-Soviet agrarian transition and discusses the epistemological and methodological categories of agrarian political economy for an analysis of class stratification; Section 3 explores the history of Uzbekistan's agrarian reforms; Section 4 outlines the methods; Section 5 provides the results; and Section 6 concludes by analysing the political economy implications of contemporary Uzbek agrarian change.

2 | AGRARIAN CHANGE IN POST-SOVIET MARKET TRANSITIONS

In post-Soviet contexts, the introduction of capitalistic institutions makes socio-economic strata more complex, especially in agriculture where geographical and socio-economical remoteness may disincentivize new forms of production and exchange. Processes of commodification are embedded and shaped by political, historical, and economic specificities (Bernstein, 2009, p. 6; Byres, 2008, 2016; Campling, Miyamura, Pattenden, & Selwyn, 2016; Patnaik, 1990). Yet, despite the specificities of each case, there are general categories that can be used to understand agrarian transition in difference contexts. The classical political economy literature provides useful epistemological categories to study the varieties of transition to agrarian capitalism (Nadkarni, 1991; Patnaik, 1976). In this framework, mechanisms of agrarian class differentiation are a combination of (a) production for sale rather than for own use through the deepening of the division of labour, (b) hiring of wage labour

through the commodification of labour, (c) increased monetization, and (d) generation of surplus over cost as a source of capital accumulation (Bernstein, 2009, p. 10). These factors identify the changing relations of production and exchange that explain agrarian class differentiation and patterns of accumulation through time and space.

How, when, and why factors of production get commoditized and markets are deregulated are crucial determinants of agrarian transition outcomes (e.g., Akram-Lodhi & Kay, 2008; Bernstein, 2014; Byres, 2008; Chayanov, 1966; Gosh, 2010; Lenin, 1977). However, although the post-Socialist state has always played a key role in transition economies either as an initiator, an accelerator, or a facilitator of commodification (Spoor, 2009), in some contexts, the state has also played the role of "public accumulator." Mechanisms of value creation and extraction through taxation, dispossession, de-collectivization, and labour exploitation in agriculture are thus vital to investigate. Indeed, agrarian reforms not only generate class conflict through new forms of labour relations (Trevisani, 2008) but also shape new distributional outcomes inside and outside agriculture and across the private and public domains.

Indeed, agrarian market transitions in post-Soviet countries have varied greatly (Kitching, 2004; Spoor, 2009). In Russia, Kyrgyzstan, Ukraine, and to a certain extent Kazakhstan, rapid land privatization led to an intensification of rural class stratification, creating new 'winners and losers' (Wegren, O'Brien, & Patsiorkovski, 2002; Wegren, Patsiorkovski, & O'Brien, 2006; Zanca, 2010). Russian urban oligarchies and the rural "rich" differentiated their positions through political power, entrepreneurial skills, and asset ownership (Wegren et al., 2006). Land privatization was the crucial trigger that led to the concentration of Ukrainian black soil in the hands of the *nouveau riche*, leading to spikes in land prices and class inequality (Mamonova, 2015). In Tajikistan, ineffective market reforms, combined with cash shortages, led to an increase in cotton farm debt (Hofman, 2018). Therefore, considering that rapid market-oriented reforms in agriculture have often been unsuccessful, resulting in high inequality and rural poverty, it is crucial to investigate the mechanisms, pace, and outcomes of specific market transitions. For instance, (a) whether and under which state-led reforms such accumulation is extracted and redistributed; (b) whether such reforms would create horizontal and vertical integration with agriculture, ultimately re-circulating in the long-run through market-based forms of production and exchange; and (c) whether transitions would trigger capitalist transformation through new forms of inequality. In conclusion, by producing diverse distributional outcomes and patterns of surplus extraction and creation, post-socialist transitions led to heterogeneous agrarian class structure and developmental outcomes. In the next section, I discuss in detail the case of Uzbekistan.

3 | THE STAGES OF AGRARIAN CHANGE IN POST-SOVIET UZBEKISTAN

After the collapse of the Soviet Union in 1991, Uzbekistan initiated a gradual reform process aimed at moving from a centrally planned to a market-based economy. A combination of overlapping pre-Soviet, Soviet, and capitalist dynamics can still be found (Kandiyoti, 2002; Zanca, 2010). Although the literature has often described the GoU led by Islam Karimov as authoritarian (for a review, see Djanibekov, Van Assche, Bobojonov, & Lamers, 2012; Lombardozzi, 2018), it is still useful to reflect on how its political model was able to implement a centralization policy on capital accumulation that triggered structural transformation through surplus creation, extraction, and distribution (Byres, 1996; Spoor, 2009, 2012).

In contrast with other Former Soviet Union countries mentioned in Section 2, the GoU was cautious about pursuing 'big-bang' privatization of public assets and liberalization of agricultural prices and trade. In the first phase of agrarian reform (1991–1998), state farms (*sovkhozes*) were transformed into collective farms (*kolkhozes*) (Trevisani, 2008). This reduced the government's financial responsibility, transferring it to cooperatives (Bobojonov et al., 2013). Yet collective enterprises lost much of their decision-making and trading power, and the remaining state procurement obligations applied only to cotton and wheat (Ilkhamov, 2007). The second phase (1998–2003) transformed *kolkhozes* into *shirkats*, a mix of cooperatives and joint-stock companies

producing rice and fodder and practicing horticulture and animal husbandry, which were seen as inefficient and loss-making (Djanibekov et al., 2012). *Dekhans*, namely, small household-based production units with the primary goal of self-subsistence, although prohibited from acquiring larger amounts of land during de-collectivization, were not an object of restructuring. However, it was argued that collective farming helped Uzbekistan to avoid the sharp land and wealth inequality registered in other post-Soviet countries (Spoor, 2009, 2012). Furthermore, it was recognized that *shirkats* had a social function, channelling the provisioning of state services (Spoor, 2012). Yet, as the sector was heavily taxed, machinery was used more rarely than the abundant low-paid manual labour (Kandiyoti, 2002). The third phase (2003–2008) saw the de-collectivization of *shirkats* through the transfer of land lease agreements to individual farm enterprises or *fermers*. This marked the *individualization* of land titles as a result of a top-down process of 'state-owned enclosures' (Trevisani, 2007). The objective was to increase land productivity and minimize the cost of infrastructure (Djanibekov, Lamers, & Bobojonov, 2010) while ensuring the efficient use of land (Ellman, 2014; United Nations Economic Commission for Europe, 2015). Most of the land titles for these newly formed *fermers* ended up in the hands of the managers (*rais*) and administrators of the old *shirkats* or managers of tractor parks who were able to convert political influence and skills into economic capital (Trevisani, 2008, p. 3). Yet, after 1998, they also had to pass an examination to prove their agronomic knowledge (Kandiyoti, 2002). Cotton remained a state-crop as well as winter wheat, which was partially subject to state procurement, and it was increased to satisfy domestic food demand.

Significant contributions in social anthropology and geography in the early 2000s investigated how the state procurement system created class stratification in rural Uzbekistan in the first years of independence (i.e., Ilkhamov, 2007; Kandiyoti, 2002, 2003a, 2003b; Trevisani, 2007, 2008; Veldwisch & Bock, 2011; Veldwisch & Spoor, 2008). These authors expanded the clientelism and neo-patrimonial studies, stressing that the historical discontinuity with the Soviet Union shaped formal and informal relations of production, affecting unequal relations between *fermers* and *dekhans* (Kandiyoti, 2003a, 2003b; Trevisani, 2007, 2008, 2009). These analyses also highlighted that the dismantling of collective farming changed the patronage system from a centralized system of provision to an ensemble of scattered conflicts over the means of production (Trevisani, 2007, p. 97). It was noted that the restructuring that marked the passage from collective farms to new "privately managed" *fermers* overlapped with a rural de-financing from central government, which destabilized the system of welfare provision in education, health, pensions, and social protection (Kandiyoti, 2003b; Trevisani, 2008). As a result, the rent captured by local elites intensified inequality between *fermers* and *dekhans* (Kandiyoti, 2002, 2003b; Trevisani, 2008, 2009). Moreover, because of increased population pressure, the poorest *dekhans* were further exposed to issues of land access and labour exploitation (Kandiyoti, 2002). The agrarian restructuring pushed *dekhans* to adopt survival strategies based on petty trading, barter, and casual jobs in the *fermers*.

In 2008, the GoU launched a new farm consolidation programme among cotton and wheat producers to optimize the size of farms and exploit economies of scale. *Fermers* leasing under 25–30 ha of land had to relinquish it, meaning that the average size of a *fermer* increased from 15 ha to a minimum of 30 ha. This fourth reform was judged negatively because, it was argued, it signalled the instability of property rights and land use and incentivized the polarization of small horticultural plots of 5 ha as opposed to large farms (Djanibekov, Van Assche, Boezeman, & Djanibekov, 2013). In addition, it created a mismatch between land distribution and the irrigation system (Djanibekov, Van Assche, Boezeman, Villamor, & Djanibekov, 2015). Finally, it fuelled the already pervasive "land hunger" recorded in the early 2000s (Kandiyoti, 2003a). As a result, in 2015, the GoU implemented a further reform, redistributing some land because of the overwhelming surplus of labour that had been created.[1] Indeed, the consolidation programme put too many farmers out of the state crop system without having any mechanism in place to absorb such labour. However, in 2005, the GoU changed the structure of agrarian production at both regional and national levels (Figure 1), through a crop diversification strategy based on HVCs. In Samarkand alone, between 2005

[1]Decree № PP-2460 (29.12.2015) "О мерах по дальнейшему реформированию и развитию сельского хозяйства на период 2016–2020."

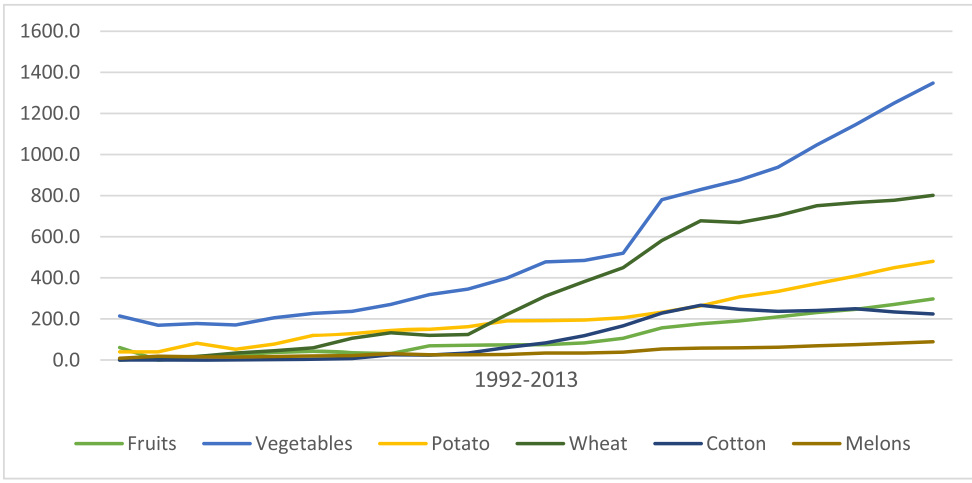

FIGURE 1 Crop diversification (in TH. tons) of HVCS in Samarkand.
Source: State Committee of Statistics of Uzbekistan and Ministry of Agriculture and Water Resources of Uzbekistan (2014)

and 2014, the HVCs' harvested area increased from 6,000 to 16,000 ha (Ministry of Agriculture and Water Resources of Uzbekistan, 2014).

Agricultural production in Samarkand, in line with the national trend, is configured around three types of farms (Shtaltovna, Hornidge, & Mollinga, 2014). First, *dekhans* have lifetime access to a maximum of 0.5 ha of non-irrigated land and 0.25 ha of irrigated land, called *tomarqua*, not always adjacent to the family house. They lack access to irrigation, subsidized inputs and mechanical equipment, and are not subject to public procurement (Rudenko, 2008). *Dekhans* produce potatoes, onions and garlic in winter and mung beans, carrots, tomatoes, onions, and a mixture of maize, sorghum, and millet for animal feed in summer. *Dekhans* were and can still be considered the main source of food among rural households, especially the poorest (Food and Agriculture Organization [FAO], 2014; Lerman, Garcia-Garcia, & Wichelns, 1996). Sometimes they engage in off-farm jobs in local services such as shops or restaurants, but in the poorest and remote rural areas, such opportunities are negligible. Second, there are cotton and winter wheat *fermers* that until 2019 received annual output targets and were subjects to state procurement quotas based on expected yields, weather, and land size (Rudenko, 2008; Uzbek National News Agency, 2020). The GoU leases land to farmers for up to 49 years (through so-called *ijara* contracts) and provided subsidized inputs.

Third, the GoU through public investments switched the crop composition of some "talented" *fermers*, replacing cotton with HVCs in targeted areas. State-led capital investment in HVCs passed from 14 to almost 45 billion sum per year (almost 5 million USD) between 2003 and 2013 (see Figure 2); 240,000 ha were converted from cotton into HVCs along with 40,000 hectares of orchards introduced in recent years (Petrick & Djanibekov, 2016; United States Department of Agriculture, 2014).

Documented by a series of resolutions[2] and by the national "Programme of Measures to Expand and Develop the Food Industry" for 2012–2015, the GoU has put such crop diversification at the centre of its rural development strategy for both economic and political reasons. HVCs aim to create more employment in rural areas, improve food security, and diversify agricultural exports towards added-valueagro-processing (FAO, 2014; World Bank, 2013). HVCs *fermers* are free to sell their output on the market at a liberalized price.

[2]Resolution of the President of the Republic of Uzbekistan "On additional measures to stimulate the export of fruits and vegetables, grapes and melons" September 19, 2016, and Resolution "On Measures to Improve the Efficiency of the Use of Land Plots of Farms in the Area of Vegetable Growing, Melon Crops, Horticulture and Viticulture" issued by the government on April 3, 2018.

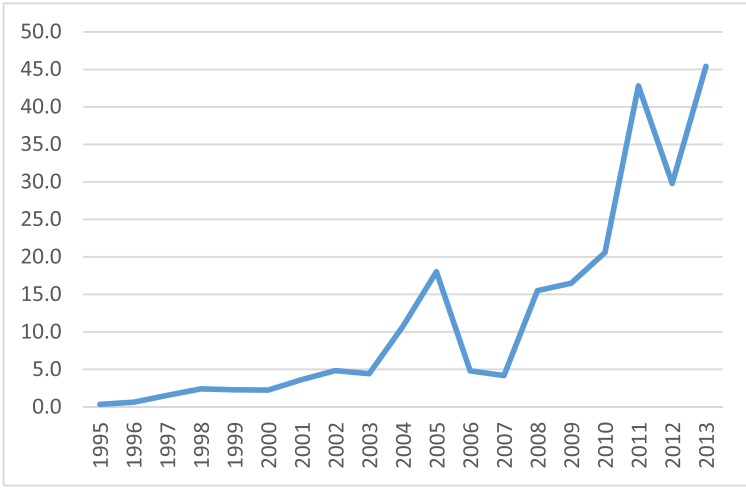

FIGURE 2 Capital investment in agriculture in Samarkand in MLD SUM. *Source*: State Committee of Statistics of Uzbekistan

Little attention has been paid to the mechanisms and implications of such HVC diversification (and intensification) for agrarian change, in particular how these have been shaping patterns of both private accumulation among farmers and public accumulation at the state level. The next sections address this gap by investigating how the mechanisms of agrarian production, marketization affect patterns of accumulation.

4 | METHODOLOGY

Market organizations and agrarian relations of production are complex and context-specific and thus require an inductive analysis. Development economists have overcome the weaknesses of universal standardized classifications of farmers based on income or land size by developing multidimensional categories based on labour relations, assets, and marketization processes (Bargawi, 2015; Bernstein, 2010; Oya, 2004; Patnaik, 1990; von Braun, de Haen, & Blanken, 1991; Zhang, 2015). To assess the patterns of agrarian class differentiation in Uzbekistan, I used a set of variables drawn from the literature reviewed in Section 2 to identify the social relations of production and exchange that explain the different positions of the farmers in this case study: (a) labour relations; (b) access to means of production and market channels; and (c) accumulation patterns through the assets index (see Figure 3). In order to grasp such differentiations, I developed an *input index*, an *output index*, and an *asset index* through principle component analysis,[3] which disaggregates indices of inputs and outputs to show the dynamics of surplus extraction and distribution between the government and the *fermers* and within classes of farmers. The asset index is a widely used indicator of wealth and income in contexts in which the most significant informal transactions in the rural economy are highly informal, seasonal, and not fully monetized and where income data are unavailable.

The construction of these indexes is not exempt from methodological critiques. Bujra (2006) noted that the creation of indexes can help reveal differences in status but not the mechanisms and causes of the asymmetric relationship between classes. For this reason, relational aspects (e.g., labour hiring and wage labour) have been included and have been complemented through unstructured interviews (Oya, 2004). Another concern raised in the literature is that small-scale surveys may not be capable of representing the target population and providing significant results. However, previous research has proved that large-scale surveys can also underestimate or misrepresent heterogeneous and complex rural labour markets, especially in developing countries (Oya & Pontara, 2015). In particular,

[3]Principal component analysis reduces the dimensionality of a set of correlated continuous variables that are not restricted to particular values.

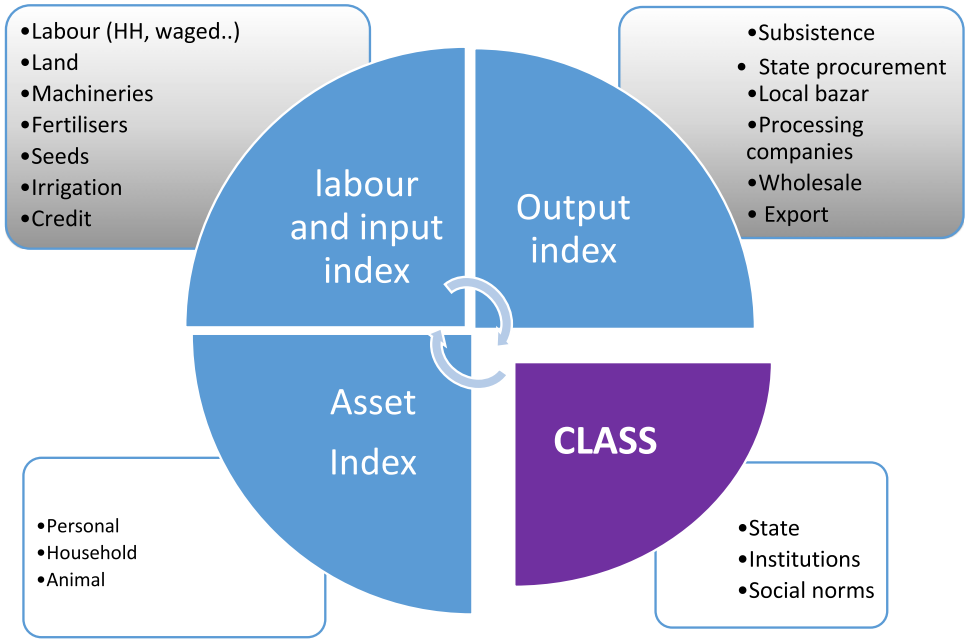

FIGURE 3 Multidimensional indexes for the Uzbek agrarian class analysis.
Source: Author

labour segmentation, for example, multiple forms of employment, payment patterns, recruitment patterns, and working relations, are hard to uncover through "standard" survey questionnaires (Oya & Pontara, 2015, p. 332). These alternative approaches create a need to scale down the unit of analysis and identify representative categories within these fragmentations. Data for this research were gathered through fieldwork conducted between August and December 2015. A stratified survey covered 120 farmers in the Samarkand region, which supported the construction of the indexes. The survey stratification was developed based on classifications used in national and regional statistics and on a previous survey conducted in the country in 2010–2011 in which *dekhans* and *fermers* were classified based on product specialization, state policy, land tenure, and forms of labour (Djanibekov et al., 2012; Veldwisch & Bock, 2011). Such a taxonomy does not reflect classes in a deductive way, rather it served two analytical objectives: First, based on the observation that crops are subject to different regulations and support, it helped to study the "accumulation effect" of crop-related regulations on the farmers who are involved in such types of production.

TABLE 1 Stratified survey sample

	***Fermers*: Cotton/wheat**	***Fermers*: HVC/wheat**	**Dekhans**	**Agriculture wage workers**
State procurement/market	Cotton and Wheat (quota) + market	Wheat (quota) + market	Only market	Only market
Labour relation	Family/wage labour	Family/wage labour	Family/off-farm labour	Family/hired in Fermers
Land tenure	Long-term lease	Long-term lease	Lifetime inheritable	Lifetime inheritable
Average hectares	59	32	0.27	0.21

Source: Author, based on Djanibekov et al. (2012) and Veldwisch and Bock (2011).

Second, it enables potential comparability with other ongoing works (Petrick & Djanibekov, 2016). Table 1 summarizes the four strata in the sample and the discriminatory criteria.

Indeed, *fermers* could be divided according to what and how they produce, being producers of either cotton and wheat or HVCs and wheat. On the basis of fieldwork data gathered in 2015, farm wage workers are defined in this research as workers on *fermers* or in agro-businesses, either casual or annual. Instead *dekhans* are defined as farmers who (a) own a plot much smaller than *fermers* (on average less than 1 ha) and are not part of the last round of HVC investments; (b) do not manage the cultivation of any state crops, namely, cotton and winter wheat; (c) rely on the sale of their crops as a main source of income; and (d) do not rely on other farm jobs as main source of income. In the scoping stage, I selected the various districts devoted to cotton and HVCs in order to identify *fermers* that produce cotton and wheat and those who manage HVCs and wheat (see Figure 4—the area in red represents Samarkand).

I have conducted the survey in the Samarkand region for three reasons. First, it is one of the regions that is a protagonist of HVC intensification thus providing a unique context for grasping the dynamics of this transformation (Figure 1). Second, the Samarkand region hosts both the cotton and HVCs producers so is representative of the different socio-economic realities of the Uzbek rural context. Last but not least, the Agrarian University of Samarkand has a vibrant international department, which granted me affiliation and provided logistical support and research assistance during the data collection process.

The interviews started by choosing a district based on its crop production portfolio. I then telephoned my point of contact in the area, who was either an employee of the *hokimiat* (the local administration office) or a farmer and began the interviews through a snowball process. Snowballing is a widely used method for sample creation in remote rural settings where there is no access to previous studies and censuses are unavailable (Biernacki & Waldorf, 1981). Farmers were interviewed with the help of two enumerators, either in their fields, in their homes, in tractor parks, or in the *hokimiat*. Qualitative methods were also deployed to untangle informal and non-monetary processes of accumulation and transformation. As well as direct observations in the field, unstructured interviews with farmers, households, and local and institutional stakeholders in Samarkand and Tashkent supported the understanding of the relational links between different agents. The present paper does not focus in detail on ethnic and gender issues, but those crucial aspects are addressed in parallel research.

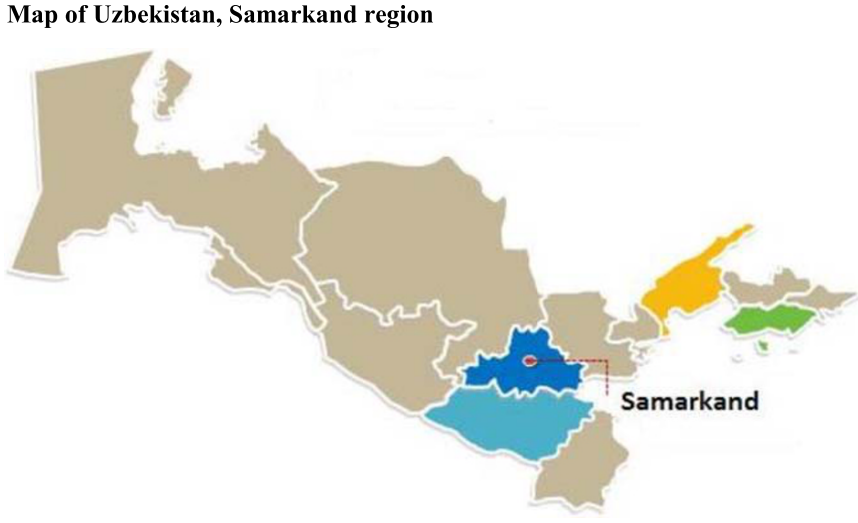

FIGURE 4 Map of Uzbekistan, Samarkand region.
Source: Rearranged from Sherzod, Kim, and Lee (2018)

5 | EMPIRICAL EVIDENCE IN CONTEMPORARY RURAL UZBEKISTAN

5.1 | Labour relations

As discussed in Section 2, one of the main categories used to analyse agrarian change is through labour relations and division of labour (Bernstein, 2010). In Uzbekistan, the multiple forms of coping strategies based on petty employment that were documented in previous ethnographic work (Kandiyoti, 2002; Trevisani, 2007) are still observable in my fieldwork data. Agrarian labour is often subject to informal contracts (Trevisani, 2007), and workers are often recruited through neighbours or relatives, confirming that localized networks are still the main way to access jobs and thus ensure livelihoods, which also reinforces power relations and patriarchal values in society (Trevisani, 2008). Rural underemployment is exacerbated by other factors such as the limited mobility suffered by poor rural households because they rarely own a car and the fact that internal migration to urban areas is regulated by the state,[4] meaning that jobs must be sought within the rural village of origin. Such limitations on workers' mobility perpetuate self-subsistence practices and limit their opportunities to diversify and increase earnings. As a result, it exacerbates conflicts over land and depresses the rural labour market. Such oversupply of labour thus also creates deflationary pressures on rural wages. The informality of labour also keeps methods of payment informal. Survey results show that 90% of *fermer* workers receive their payment wholly or partially in-kind rather than in-cash, especially those working in cotton farms. *Fermer* managers often compensate workers in wheat or in a combination of money and wheat. It is common also to compensate workers in land, as a sort of 'ad hoc' sharecropping. Based on interviews and observations, after the harvest season, *fermers* allow workers to cultivate a small sub-section of the land for self-consumption. *Fermers* and *dekhans* are also still bonded by patronage and informal non-market practices of exchange. For instance, at the end of the cotton harvest season, women collect branches of cotton from *fermers'* land for fire-making, picking seeds to make oil, and gathering the remains of cotton flowers to make blankets (*kurpacha*), as in the post-independence era. On the basis of farmers' interviews, they confirmed that these non-commodities are accessed by poor *dekhans*, for free, as a sort of public good. Such forms of 'socialized provision' suggest that the process of dispossession from the means of (social) (re)-production is still incomplete. By providing a buffer for the rural poor through access to non-commoditized*use-values*, such non-market transfers contribute to the reproduction of livelihoods and to the quasi-immobility of rural accumulation, which also maintain local power structures. The non-monetized methods of payment and exchange hamper the circulation of money and its use by *fermer* workers and *dekhans*, not only for the purchase of basic personal and household assets (i.e., cars and fridges), but also for the purchase of means of production by credit, thus preventing a deepening of the division of labour and private wealth accumulation (Kandiyoti, 2003b; Trevisani, 2007). Yet these labour relations are exacerbated by class conflicts triggered by the unequal access to land and inputs (Trevisani, 2008). The persistence of informal social contracts and fragmented labour de-commodification described by Kandiyoti (2002) almost 20 years ago are still widespread, which suggests a striking immobility in the process of agrarian transition.

Yet, despite such signs of continuity, compared with what was observed in the early 2000s, HVC *fermers* are today at the epicentre of labour demand in rural Samarkand. Although permanent, seasonal, family paid, or unpaid forms of labour remain widespread, labour-intensiveHVCs—fruit gardens and greenhouses—employ more and more permanent and skilled labour. Table 2 confirms that cotton *fermers* rely more on seasonal than on permanent labour.[5] Indeed, there is a direct relationship between seasonal labour and land size, which is explained by the fact that cotton–wheat farms are larger on average.

[4]The "Statutes on the passport system in the Republic of Uzbekistan" (February 26, 1999) regulate the system of residential permits—*propiska*—that limits people's mobility between rural and urban areas where more labour opportunities might be available. This system creates an obstacle to legal seasonal labour mobility.

[5]During the cotton harvest, labour is usually mobilized from the education or public administration sector. The GoU arranges travel and provides basic shelter and meals. It was decided to include students in the seasonal workers category in the survey, because it was noted during my fieldwork that there were no differences between the daily wage paid to students and that paid to those hired on the "free-market," mostly women (UZS 20,000 or $4).

TABLE 2 Seasonal and permanent wage labour

	Seasonal workers				Permanent workers			
	M	Median	Maximum	Minimum	*M*	Median	Maximum	Minimum
Fermers: Cotton/wheat	16	10	100	0	6	0	35	0
Fermers: HVC/wheat	45	30	130	10	5	4	15	0

Source: Author's survey data.

The stories of Oybek and Omid, a cotton farm manager and a HVC producer, respectively, confirm these diverging trends. Oybek lives together with his wife, brothers, and four children in a village 80 km north of Samarkand. The farm was established in 2006. He has a plot of 34 ha where he cultivates wheat and cotton. He employs 30 workers just to pick cotton between September and November by paying them 20,000 sums ($4) and 2 tons of wheat per day, and his wife works on the farm as well. He sells 20% of the wheat to the bazaar for 1,000 sum per kilogram and 80% through the procurement system to the state for 400 sums per kilogram. Whereas Omid, a farm manager producing wheat and HVCs, cultivates 15 ha of grapes and vegetables and he employs 18 permanent workers with an average wage of 450,000 sums per month (and 20,000 per day for on-call workers to harvest peaches). Wages vary depending on the task.

Furthermore, data from HVC *fermers* suggest an increased monetization of wages, which is indicative of the growing capital accumulation of HVC *fermers*. This expansion is also confirmed by the increase in labour productivity registered in Samarkand (Ministry of Agriculture and Water Resources of Uzbekistan, 2014). Yet, within HVCs *fermers*, there are differentiations. Small undercapitalized farms coexist with technologically endowed ones that, according to interviews, can employ up to 80 permanent workers with an average wage of 600,000 sums per month and are able to produce for export due to their good storage capacity. Such 'benchmark' farms can lease over 200 ha of land in irrigated and non-irrigated locations. According to Food and Agriculture Organization experts, such big concessions are given by the local administration to farmers who are able to invest in pumping and other technologies. Also, the intensification of HVCs led to the expansion of the agro-processing industry, which according to interviews conducted in agro-firms, absorbed around 1,000 workers in the region and established backward linkages with HVCs *fermers*, as we shall see later. Thus, the demand of permanent labour in contemporary rural change is a crucial indicator of the expansion of HVC farms' production capacity. Cotton seems to be less of a priority within the state strategy of agricultural reforms.

In conclusion, over the past decades, the slow crop commodification, low labour demand, and depressed rural wage dynamics have reinforced the unequal and slow patterns of accumulation among *fermers*, with negative outcomes especially for *dekhans* and wage workers. This was symptomatic of the low level of private capital investment in agriculture. However, over the past few years, a new phase of agrarian transition has begun, which is passing through a slow process of commodification of production and exchange and which includes a new proletarianization of rural labour through the HVC sector.

5.2 | Land

Land is a crucial asset in capitalistic agriculture, as it underpins non-mobile capital accumulation. Previous studies of Uzbek agrarian transformation have systematically looked at land, which in Uzbekistan has been identified, together with local "bureaucratic capital," as a crucial determinant of rural power and class (Trevisani, 2009, 2008; Kandiyoti, 2002). The GoU has intervened to shape land use and access in different ways, at different time, and with different objectives, so recent patterns of capital accumulation also need to be understood through the boundaries imposed by the state on land redistribution. Land policy is relevant to understand farmers' stratification for two

reasons: First, land is not yet a commodity in Uzbekistan; thus, property rights are not exchanged on the market but are assigned by the GoU through non-transferable49-year lease titles; second, land is not subject to concentration. Yet *fermers* are subject to confiscation if they do not fulfil their production quotas. Land titles thus still tailor power relations within local networks (Trevisani, 2007). Land is seen as a wealth magnet, because it is instrumental in the exercise of economic power over local resources and labour and thus affects the dynamics of value distribution. This system allows those who benefit from formal responsibility for land, namely, the *fermers*, to capitalize from such rent, as well as redistributing informal resources within the community (Kandiyoti, 2002).

Although the *shirkats* have widely disappeared, Table 3 confirms the institutionalized differences in land size among the various types of farms in the survey, as well as the unequal access to land and wage labour suffered by *dekhans* in comparison with *fermers* (Kandiyoti, 2002). The striking difference in access to land illustrates the clear divide between *fermers* and *dekhans* identified in the previous round of studies (Trevisani, 2008). Table 3 also highlights that even within the class of *fermers*, land size varies enormously, which confirms that there is a wide internal differentiation within the class (Kandiyoti, 2003b; Trevisani, 2007). For instance, it was observed during interviews that cotton *fermers* with small land are just above the average poverty level, not dissimilar to the better-off*dekhans* (Trevisani, 2008). However, cotton–wheat*fermers* on average have far more land than wheat–HVC*fermers*, which suggests a weaker correspondence between land size and level of capitalization. Indeed, although wheat–HVC*fermers* have access to less land on average, survey results show that their land is of higher quality (measured in *bonitet-bal*) and with a higher level of input use. In comparison with cotton-dominated*fermers*, HVCs generate more jobs and market transactions. Therefore, although local power dynamics play a role in securing access to land, land size in this context is becoming less of an explanatory determinant for understanding rural transformation and private accumulation.

After de-collectivization, fruits and vegetables were cultivated in extensive and under-mechanized ways by *dekhans*. The land reconversion towards HVCs that started in 2005 created the conditions for new forms of accumulation and exploitation in Samarkand. It is undeniable that individual *fermers* still access land through informal neo-patrimonial networks, which, as already mentioned, are composed of a combination of bribes and technical capacity (Trevisani, 2008, 2007; Veldwisch & Bock, 2011). However, the 'client-patronage' narrative is unable to reveal the underlying leitmotivs of accumulation, which in this case appear to be based on profit-led market strategies and the ability to invest in input and output commercialization specific to HVCs. These are linked to local relations of agrarian production and entail new processes of redistribution within the community. HVCs *fermers*are sourcing private capital from urban businesses outside agriculture and through state-subsidized credit in local banks.

In sum, the recent HVC intensification confirms that although land size is instrumental in the process of class stratification, it cannot be treated as the only explanatory indicator of class position (Zhang, 2015). Land alone does not explain accumulation patterns in Samarkand, because state-led organizational reforms driven by political objectives and co-shaped by agro-ecological factors have affected the dynamics of accumulation. Finally, although the mechanisms of land acquisition in Uzbekistan remain unequal and non-transparent (Zanca, 2010), the state policy of non-commodification has avoided land concentration and violent dispossession. Yet it has created a further barrier to the dynamics of non-mobile private capital accumulation, which nonetheless has enabled the state to plan and execute substantive crop diversification towards HVCs.

TABLE 3 Land size by type of farmer

	M	Median	Maximum	Minimum
Fermers: Cotton/wheat	59.63	51.25	273	22
Fermers: HVC/wheat	31.5	18.26	120	10.22
Dekhan cum farm wage worker	0.21	0.15	0.80	0.05
Dekhans	0.27	0.16	1.15	0.08

Source: Author's survey.

5.3 | Physical inputs: A state support index

Access to means of production is fundamental to productivity enhancement, translating into higher returns, faster accumulation, and thus a virtuous circle of capitalist development. Here, I explore the continuities of the "modernizer state" through access to state-subsidized means of production already observed in previous studies (Kandiyoti, 2002; Trevisani, 2009; Zanca, 2010). Later, I outline divergences with market-based inputs and how these contribute to explaining the shift towards emerging marketization and private accumulation. In the survey, I asked *fermers* whether they had access to state-subsidized tractors, seeds, fertilizers, water, credit, and extension services, through which I develop an index of inputs in Figure 5.[6] The results confirm a sharp differentiation between *fermers* and non-*fermers* with regard to access to inputs.

Until 2019, the system remained similar to the post-decollectivization period, as *fermer*s maintained privileged access to state-subsidized inputs in comparison with *dekhans*, yet wheat–HVC*fermers* do receive more support, especially credit. *Fermers* received *seeds* and *fertilizers* from the state agencies, through the stipulation of preferential contracts facilitated by the local administration. *Irrigation* was also provided to state crops on payment of a subsidized fee.

In order to incentivize investment, the GoU established a system of public finance that provides *fermers'* managers with access to preferential credit channels through Agri-bank at an interest rate of around 3%. This is below both commercial interest rates and the rate of inflation, which, although volatile, is on average higher that 5% (World Bank, 2013). Moreover, newly established vineyards and HVC farms are exempt from tax for 2 and 3 years, respectively (FAO, 2014).

The local government still manages tractor parks at the district level where *fermers* can rent tractors for a small fee, which reinforces the dependency of *fermers* on local governments (Trevisani, 2008). Although tractors are crucial for production, interviews confirmed that *fermers* still struggle to access rental services either due to cost or lack of availability (Trevisani, 2008). Nevertheless, as wealthy farm managers can invest their own capital, they usually own one or more tractors. Indeed, survey results show that HVC *fermers* own more private tractors than cotton *fermers*. Furthermore, fieldwork observations show that they sometime compete with public parks to access rental services. Thus, HVCs *fermers* are not only protagonists of higher capital accumulation but also generate new types of conflict among *fermers*.

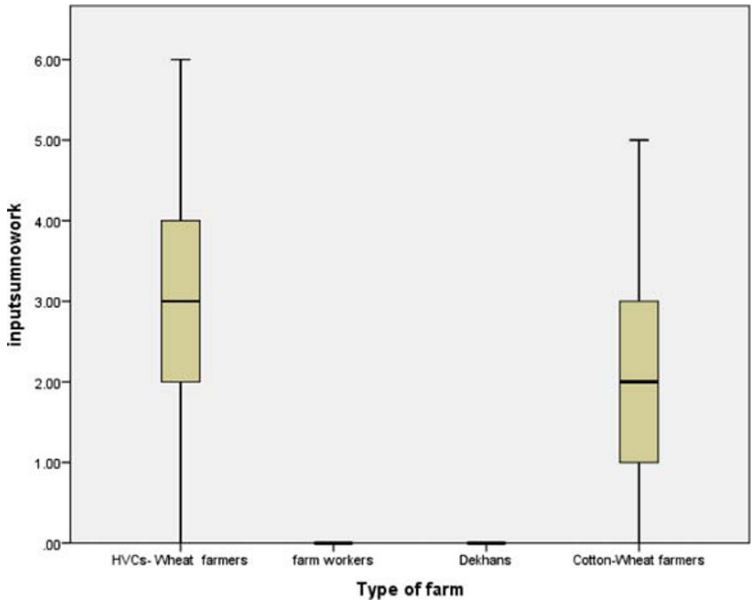

FIGURE 5 Input index.
Source: Author's survey data

In conclusion, both types of *fermers* benefitted from access to the state-managed system of provision of fertilizers, tractors, water, land, and credit thus sit in a privileged position with respect to *dekhans*, which have been forbidden from buying fertilizers and pesticides from state companies, triggering informal and illegal trade (Trevisani, 2009). Therefore, the concessions and differentiation in the use of and access to means of production confirm the significant divide between *dekhans* and *fermers* already existing after de-collectivization. Yet it also suggests that the subsidized use of inputs has supported the intensification of the HVC sector and fostered the beginning of new forms of agrarian private accumulation through state support and taxation.

5.4 | Marketization of agricultural output

Class stratification resulting from transition to a market-based economy passes through a stage of increasing output commercialization. As Bharadwaj (1985) noted, the output market is usually the first market to be commercialized through price liberalization. However, market exchanges are not uniform and are determined not only by prices but also by qualitative factors such as proximity, power, and trust, which shape the scope and nature of the exchange (Bharadwaj, 1985). Although marketization has been defined and interpreted in many ways, in general terms, it means that a product has become a commodity, passing entirely or partially through a market- or state-managed circuit of exchange rather than being exclusively used by its producers for final consumption or in other words for self-subsistence. This transition allows the cumulative integration and mediation of money as a means of exchange, triggering mechanisms of asset and capital accumulation where investment for profit acts as a driving force. This fieldwork data expand on previous empirical evidence on recent new relations of exchange. The recent diversification towards HVCs certainly makes it worth looking at the new forms of marketization decoupled from state control. For the scope of this exercise, I have inductively identified six non-mutually exclusive output channels in this context: (a) *own consumption*, self-subsistence (no money involved); (b) *state procurement*, production sold to the state at a fixed price in exchange for money; (c) *local bazaars*, engagement with local markets through money and barter; (d) *wholesale*, engagement with more structured retail through money; (e) *processing companies*, engagement with wider distribution through money; and (f) *export*, engagement with the international market through local currency and foreign exchange. This classification reflects the various distribution channels for crops produced by the farmers interviewed during the fieldwork, that is, when state procurement was still in place. It also shows the increasing monetization and sophistication of the market channels with which farmers engage. For the purpose of quantitative analysis, wholesale and exports are merged, because even if the sale prices are not equal (export generally entails higher returns), both channels derive the highest returns among the available alternatives as well as foreseeing the use of traders. Yet HVC export increased from US$ 2 million to 16 million between 2010 and 2016 (Food and Agriculture Organization Corporate Statistical Database), also due to the export promotion strategies implemented through public policies. A final point can be made about final consumption (classified here as "own consumption") and its relationship with the output index. As food commodities have both *use-value* and *exchange-value*, consuming the output entails an opportunity cost, represented by the return that could have been obtained from selling the same output.

Although this analysis confirms that the rural market is thin, and informal transactions are still in place, Table 4 (which shows interviewees' non-mutually exclusive responses about the various destinations for food and state crops) and Figure 6 show that wheat–HVC*fermers* are involved in the most advanced forms of marketization such as the processing sector and international markets. Nevertheless, the outliers represented by asterisks and circles suggest that market positions are highly diverse even within the same class, and only a few exceptional *dekhans* producing grapes and peaches have proved to be successful in diversifying their commercialization strategies and guaranteeing high returns. Wheat–HVC*fermers*, being more market oriented, obtain the best returns but are also exposed to the highest risk of not selling their commodities. Data also show that although 90% of *dekhans* have

[6] I include private tractors and other market assets in the asset index to isolate state-supported inputs.

TABLE 4 Output destinations

%	Own consumption only	Own consumption + public procurement	Own consumption + bazaars	Own consumption + processing companies	Own consumption and wholesale and/or export
Cotton + wheat farm manager	0	100	63.3	0	0
Wheat + f&v farm manager	0	96.7	93.3	86.7	26.7
Farm wage worker	20	0	76.7	3.3	0
Dekhans (tomarqa)	10	0	90	0	0

Source: Author's survey data.

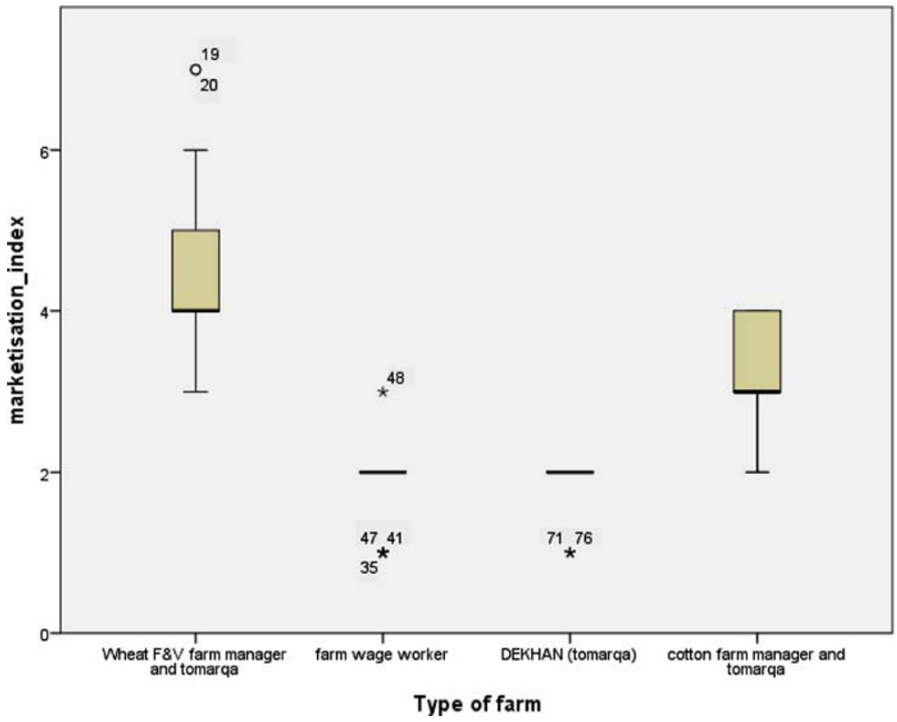

FIGURE 6 Output index.
Source: Author's survey data

access to less land than *fermers*, they still engage in local commodity market exchange given their limited capacity to engage in more sophisticated market opportunities such as export markets, proving that smallholder farmers rarely produce only for self-subsistence (Bernstein, 2010; Oya, 2004). Their engagement with petty trading is not perceived as an opportunity but rather as a way to satisfy their basic needs (Kandiyoti, 2002). In turn, wheat–cotton*fermers* sell fewer crops through local market channels than *dekhans*. As already noted in Kandiyoti (2003b) and Trevisani (2008), this is because the stable income received through state procurement has discouraged *fermers* from engaging with potentially unstable markets. Like *dekhans*, *fermers* also have access to household plots—*tomarqua*—and thus produce a similar quantity of food crops, mostly destined for self-consumption. Finally, data on levels of market integration of *dekhans* and rural wage workers show that the latter rely much less on the market. Indeed, selling their labour power to *fermers* enables wage workers to access land (usually between 0.1 and 0.5 ha) and in-kind payment (usually wheat). Moreover, selling crops at the bazaars requires labour time, which can create a conflict with waged labour time. These tasks are very often redistributed within the household, to wives or sons, but in some cases involve the use of middlemen and informal traders. The increased commodification of relations of exchange through the multiple HVCs markets is shaping social differentiation.

5.5 | Patterns of accumulation

In order to assess whether differences in input use, labour relations and crop marketization are shaping diverging patterns of capital accumulation, in this section, I explore patterns of wealth through an asset index. Although the process of capital accumulation is crucial in the path to capitalist transformation (Byres, 1996), I show how barter, in-kind, and informal exchanges still play an important role in rural Uzbekistan (Kandiyoti, 2002; Zanca, 2010).

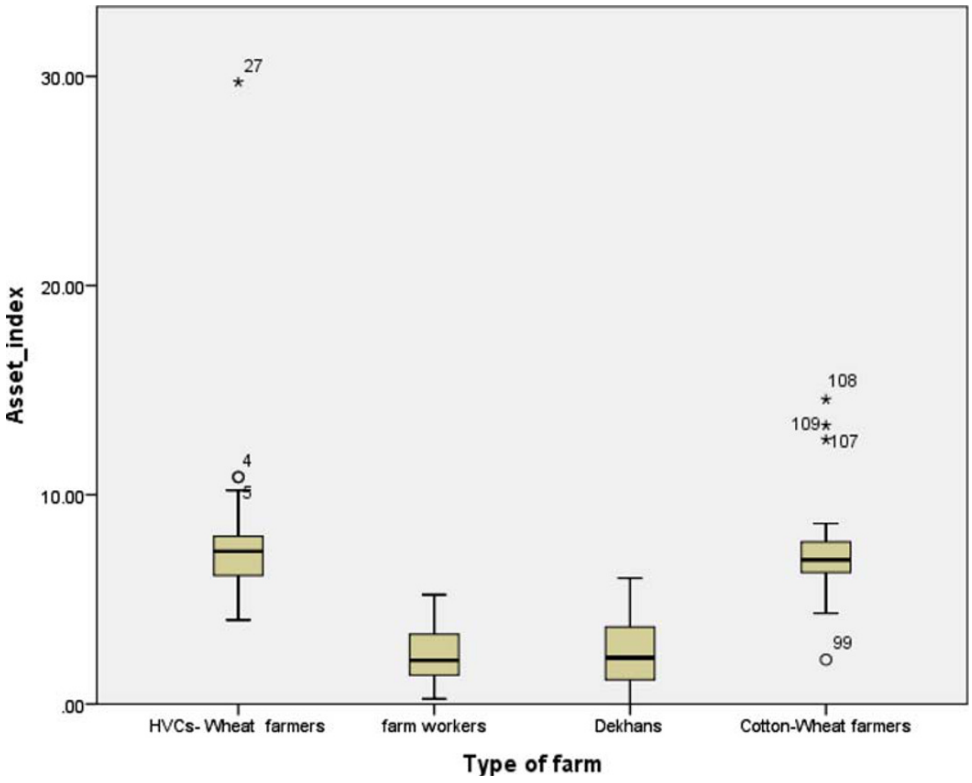

FIGURE 7 Asset index.
Source: Author's survey data

Of 30 assets measured, I have selected the 13 most meaningful assets[7] (expressed as categorical binary variables: 1 if owned, 0 if not) in terms of variance among the observations (Figure 7).

Asset ownership confirms the same patterns already seen with the previous indices. Figure 7 shows that farm workers and *dekhans* have less access to assets, whereas *fermers*, especially HVCs–wheat, have the highest index values across the population, including the presence of rich outliers. Fridges, bank accounts, tractors, and cars had the highest loading; hence, "privately" procured inputs play a role among the higher strata of farm managers. When looking at animal assets, *fermers* unsurprisingly own more livestock on average. *Dekhans* have indeed been deprived of any possibility of farming livestock (Trevisani, 2008), which represents an important collateral for the rural livelihood as it is a direct and functional source of food for either final or productive consumption. These results confirm that *fermers*, especially those that produce HVCs, show the highest levels of asset accumulation because they have been benefitting from preferential state-managed channels for inputs and outputs.

6 | ACCUMULATION AND SOCIAL STRATIFICATION IN AGRARIAN UZBEKISTAN

The previous section has developed through secondary and primary data and empirically grounded analysis of the recent state-led reforms. Such reforms, by creating new patterns of accumulation through crop diversification,

[7]Gas heating, fridges, chairs, washing machines, cars, tractors, beds, bank accounts, air conditioners, DVDs, sewing machines, beds, and cows.

shaped agrarian change in Uzbekistan. By answering the agrarian political economy questions of "Who owns what? Who does what? Who gets what? What do they do with it?" (Bernstein, 2010), the empirical evidence provided in this case study has once again disproved the neoclassical analytical fallacy that sees farmers as a homogenous category and ignores stratifications and antagonisms among them (Bernstein, 2010; Byres, 2003). Methodological rigour is instrumental in providing insightful empirical material that becomes a source of reflection and pushes the boundaries of theoretical analysis forward.

The triangulation of multiple data sheds light on the tensions and contradictions of the process of accumulation; in particular, if and how the slow but ongoing reconfiguration of relations of agrarian production and exchange have been triggering diverging patterns of social stratification in relation to the access to inputs, labour relations, output marketization, and asset accumulation. By constructing multidimensional indices for inputs, outputs, and assets, and complementing these with secondary data, direct observations, and interviews, this study has shown that, although many of the dynamics linked to wheat and cotton identified in ethnographic research of the early 2000s have remained strikingly similar until 2020, since 2015, HVCs have been subject to different speeds and modalities of commodification and commercialization for both inputs and outputs, thanks to ad hoc state-led marketization policies and investments. Such a setting determined the higher HVC farmers' ability to produce, exchange, and accumulate, thus shaping agrarian class differentiation. The recent patterns of accumulation are in the hands of a few powerful *fermers* that, according to interviews and observations, are less linked to cotton. These local businesses are increasingly intertwined with new, non-agricultural urban private, and foreign capitals that are increasingly investing in both backward and forward linkages in agriculture.

6.1 | Differentiations among farmers

The state-led policy of crop diversification shaped three main classes of farmers, which are nonetheless subject to internal variations. The first is identifiable within the newly established wheat–HVC*fermers*, among which evidence suggested the presence of rich quasi-capitalist farmers. These *fermers* often benefitted not only from local power and easy access to means of production linked to state crops but also from outside the circuit of state agriculture. Wheat–HVC*farmers* accessed advanced technology for irrigation, pumping, storage capacity, harvest machinery, and sometimes engaged in basic forms of food processing. Whereas wheat production was still subject to public procurement until 2020,[8] wheat–HVC*fermers* have been protagonists of a wider accumulation of inputs, outputs, and assets, often decoupled from the traditional arena of conflict and social contracts that has historically been regulated through and around cotton. They diversified their commercialization strategy by selling HVCs to agri-firms or to foreign markets, through which they increased their return opportunities. They engage in intensive money transactions through off-farm activities and banks and hire permanent waged labour. Yet unclear dynamics of land appropriation persist, which are also combined with unchanged relations of dependency and exploitation of poor *dekhans*. HVCs–wheat *fermers* appear to be at the forefront of the "commodification" process, being protagonists of the most sophisticated forms of output commodification along the value chain. This is also visible through their advanced knowledge of new crop varieties and their private asset endowments.

Second, cotton–wheat*fermers*, being limited in their market expansion by the state, so far have been protagonists of a less dynamic pattern of accumulation. Like wheat–HVC*fermers*, they have traditionally benefited from having more land and access to means of production. They mostly hire seasonal labour, especially during the cotton harvest season, thus retaining significant political-economic power in local communities. However, the state-imposed rotation of wheat and cotton have not allowed them to engage with more dynamic circuits of commercialization, which was raised during interviews and confirmed by the marketization index. This confirms that forms of intra- and

[8]Resolution of the Cabinet of Ministers #866 "On measures for the implementation of market mechanisms in delivery system of grain, flour and bread" from October 14, 2019.

inter-class inequality and exclusion occur even in contexts of strong state intervention and gradual market transition (Wegren et al., 2006). Cotton producers have been beneficiaries and victims of this system, which enabled them to access land and inputs to produce cotton. The system has provided a stable output demand and enforced their local power but at the same time limited their possibilities of accumulation by excluding them from markets and from the opportunities for higher returns (Kandiyoti, 2002).

At the bottom of this system, the poor peasants—*dekhans*—are compelled to engage with the market more than cotton *fermers* in order to guarantee their social reproduction. Empirical evidence has confirmed that *dekhans* are inserted into various types of underdeveloped markets not only through petty trading and other occupations in the local market but also through seasonal and permanent forms of labour relations with rich *fermers*. Crop diversification (and commercialization) has increased demand for wage labour and created new forms of inter-dependency between *dekhans* and *fermers*, which has nonetheless intensified inequality through labour exploitation. *Dekhans* are highly exposed to systemic market vulnerabilities, in relation to food access and to the commercialization of outputs, and they have no opportunities for accumulation. Yet the existence of dekhans, which is protected by state regulation, is crucial to understanding the slow process of capitalist development because it has at least four political implications. First, it preserves the same conflict, and interdependencies, with richer *fermers* that are built on the blurred boundary between formality and informality. Thus, trust, patronage, networks, forms of reciprocity, and status matter and limit the formation of a formal labour market. Second, it provides a cushion against extreme rural poverty and food insecurity (Kandiyoti, 2003b) because it prevents the complete separation of the workers from the means of production. Third, the strict rules on their internal migrations (discussed above) prevent rural–urban interconnections and the migration of the "reserve army of labour" to the cities; thus, it represents a further impediment to the process of primitive private capital accumulation through land dispossession and proletarianization (Bernstein, 2010; Harvey, 2003; Marx, 1976). Last but not least, their existence creates a deflationary pressure on rural labour costs, which, by creating a disincentive to technological upgrading, slows down the pace of market transition and private accumulation (Byres, 1996; Zhang, 2015). The buffering role of *dekhans* is therefore crucial to understand the slow-paced characteristics of agrarian change and the broader capitalist development of Uzbekistan.

Thus, patterns of agrarian accumulations should be understood here as the result of a combination of multiple push and pull forces that are dialectically mediated by the market and by state policies: on the one hand, the state-managed system of land acquisition and access to subsidized inputs and, on the other hand, the process of market deregulation and the rise of agro-processing businesses, which has led to the intensification of HVC marketization. In this multifaceted process of reform and continuity, the crucial distinguishing determinant to assess differences between capitalist farmers and rich peasants (Byres, 2003) was the marketization of HVCs. Indeed, although *fermers* are unable to scale-up production by reinvesting their "profit" in non-mobile assets, that is, land, HVC farmers often divert their surpluses into horizontal or vertical commercial activities, which provide them with a source of accumulation.

6.2 | State capitalism and slow-paced agrarian change

The slow pace of class differentiation and private accumulation discussed so far feeds the debate elaborated in the agrarian political economy literature about the changes and continuities of capitalist transformation in the context of underdevelopment (Byres, 1996, 2003). Evidence has shown that for over two decades, the state remained a strong economic actor and regulator in Uzbek agriculture, shaping market forces and also limiting the process of private accumulation in multiple ways. First, land is not a commodity and hence is non-tradable, so economies of scale and scope cannot be achieved through land concentration. Second, the public provision of inputs (guaranteed at a fixed price) partially relieved farmers from the competition-driven pressure of production cost minimization. Third, as public procurement for wheat and cotton guaranteed to *fermers* a 'taxed' fixed price, their production regimes bypassed the objectives of profit maximization. Fourth, forms of barter and reciprocity are still widespread, hindering

not only the full realization of private relations of production, for instance through a deeper formalization of the division of labour, but also liberal forms of socio-economic progress (Kandiyoti, 2007; Trevisani, 2008). This informal welfare has been a form of resistance implemented by farmers to cope with the continuous extraction of resources by the government. Such survival mechanisms also helped to absorb the risks associated with the mild but ongoing market transition, which has exacerbated the individualization of socio-economic responsibilities and dynamics of exploitation. Last but not least, the transformation of the small peasantry into wage workers (proletarians) and the consolidation of capitalist farmers has been so far restricted politically, thus avoiding the creation of an autonomous and politically conscious rural working class (Trevisani, 2008). These contradictions of state-led protection and exploitation have slowed down the rate of private investment in favour of state-managed surplus extraction through state crops.

However, it is important to assess the implications of this lag in private accumulation in relation to whether such surplus capital extraction has been redistributed nationally beyond agriculture. Preobrazhensky's primitive socialist accumulation "of material resources in the hands of the state, mainly or partly from sources lying outside the state economy complex" (1965, p. 84) offers a valid support for analysing why the state filtered the process of capitalist penetration and class formation. Indeed, the combination of inputs provision, taxation, and public procurement helped to subsidize surplus value creation to enable absolute surplus value extraction by the state. The deflationary pressure on rural wages, food, and labour costs acted like a subsidy to the process of inter-temporal surplus transfer within and outside the agrarian sectors. The surplus created was extracted by the state to centralize capital investments and is being redistributed to finance the economic transformation through higher added-value sectors (Lombardozzi, 2018). For example, Food and Agriculture Organization figures show that the GoU has reduced the unprocessed cotton export by one third and is investing in the development of a domestic textile and agro-processing industry.

Furthermore, although this state-managed system of input provision was partially attached to compulsory production, dependence on local authorities, and often dysfunctional state procurement (Kandiyoti, 2003b; Trevisani, 2007; Zanca, 2010), it has avoided the potentially dramatic outcomes seen in many liberalized rural settings, where fragile commercial farmers have lost economic or physical access to such crucial inputs (Oya, 2007) and become a class of landless peasants not ready to be absorbed into an underdeveloped industrial sector (Chang & Nolan, 1995; Spoor, 2009). Indeed, many governments in other developing and transition economies have been forced by international financial institutions to rapidly remove subsidies and liberalize agrarian inputs, which has led to an increase in input prices, import dependency, market price volatility, and ultimately a decline in the use of inputs. Unregulated market transition therefore has enabled the creation of "super winners" and "super losers" and high inequality. The GoU has remained for the past decades the main economic and political agent of the agrarian economy, with the advantage of being able to exercise political pressure on potential competitors, either foreign direct investments or powerful local farmers, to its own political, economic, and social ends. The state mediated international vertical integration of agrarian production, while implementing economies of scope and scale by extracting value from the sector at the expense of farmers. It has defined pace and directions of accumulation by regulating access to both the means of production and market channels.

As a result of the most recent GoU measures, state-led accumulation will likely decline because cotton and wheat procurement mechanisms will be phased out and price liberalized by 2020 (International Food Policy Research Institute, 2020; Uzbek National News Agency, 2020). In parallel, scattered but new forms of private accumulation will continue taking place through the intensification of HVCs and the upgrading of the agro-processing industry (FAO, 2014). New forms of private capital investment, both national and international, could create formal employment opportunities, relieve *dekhans* from the oppressive and paternalistic relationships with the local rural elites and boost internal domestic private demand to trigger deepening of the division of labour. The important objective of job creation to sustain domestic demand has to be matched with the need to increase productivity to survive international market competition in and outside agriculture. The next decade will be decisive in determining whether Uzbek agriculture, through ongoing liberalization reforms in the wheat and cotton sectors, will fully integrate with capitalist

dynamics and whether the state will be able to mediate neoliberal pressure by regulating distributional impacts across society. This will largely depend on the economic and political role the state assigns to agriculture and rural industrialization in relation to its broader national growth strategy. The heterodox strategy of transition adopted by the state so far, including the buffering role given to the *dekhans*, offered an interesting comparative lens through which to understand the challenges and outcomes of agrarian capitalist development in post-Soviet contexts and beyond.

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